

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,297	01/22/2002	Heinz Walter	740116-358	4774
22204	7590 02/07/2005		EXAMINER	
NIXON PEABODY, LLP 401 9TH STREET, NW			WEST, JEFFREY R	
SUITE 900	EEI, NW		ART UNIT	PAPER NUMBER
WASHINGTON, DC 20004-2128			2857	
			DATE MAILED: 02/07/200	5

Please find below and/or attached an Office communication concerning this application or proceeding.

14	,	٩	`
١,		•	٠,

Advisory Action

Application No.	Applicant(s)			
10/051,297	WALTER ET AL.	WALTER ET AL.		
Examiner	Art Unit			
Jeffrey R. West	2857			

Before the Filing of an Appeal Brief --The MAILING DATE of this communication appears on the cover sheet with the correspondence address --THE REPLY FILED 21 January 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. 1. X The reply was filed after a final rejection, but prior to filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods: a) The period for reply expires <u>4</u> months from the mailing date of the final rejection. b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL 2. The reply was filed after the date of filing a Notice of Appeal, but prior to the date of filing an appeal brief. The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a). **AMENDMENTS** 3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because (a) They raise new issues that would require further consideration and/or search (see NOTE below); (b) They raise the issue of new matter (see NOTE below): (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or (d) They present additional claims without canceling a corresponding number of finally rejected claims. NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)). 4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324). 5. Applicant's reply has overcome the following rejection(s): 6. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s). 7. Tor purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows: Claim(s) allowed: Claim(s) objected to: Claim(s) rejected: Claim(s) withdrawn from consideration: __ AFFIDAVIT OR OTHER EVIDENCE 8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e). 9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1). 10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached. REQUEST FOR RECONSIDERATION/OTHER 11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet. 12. Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s, 13.
Other: ____ SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2800

Continuation of 3:

The proposed amendment is not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal because the proposed amendment only seeks to modify claim 16 to contain limitations already present in claim 1. Further, the proposed amendment does not address the outstanding rejection of claim 3 under 35 U.S.C. 112, second paragraph.

Continuation of 11:

Applicant first argues that "Roper et al. disclose a two-wire industrial process control transmitter, which comprises a sensor 14, including a sensor charge circuit 18 and a sensor detector circuit 16, a A/D converter 20, 42, a microprocessor 22, 50 and an analog end stage 28, 56 (I/O circuit). However, contrary to the Examiner's assertion in the Office Action on page 5, the processor circuit (microprocessor 22, 50) is connected serially between the sensor 14 and the analog end stage 28, 56. It appears that the Examiner has compared the sensor detector circuit 16, shown in Fig. 2 of Roper et al. with the analog end stage, mentioned in claim 1 of the present patent application, which is not correct. From Figs. 1 & 2 of this reference, it should be clear that, in the electrical transducer disclosed by Roper et al. the sensor detector circuit 16, as well as the sensor charge circuit 18, form part of the sensor 14, whereas the analog end stage of this transducer is realized by the input/output circuit 28, 56."

The Examiner first asserts that claim 1 only requires that the analog end stage be "connected downstream of the sensor" and that the operation of the analog end stage be for "converting an output signal of the senor into an impressed output current with a magnitude which is a measure of the quantity to be measured."

As seen in Figure 2, the "Sensor Detector Circuit" and subsequent "Analog Circuits" and "Level Shift" are downstream of the sensor and the specification indicates that the "[d]etection circuit 16 provides an analog signal representative of a value of the process variable to analog-to-digital converter 20 which operates to provide a digitized output representative of the variable to microprocessor 22", and therefore these circuits meet the required operation of the analog end stage.

Applicant also argues that "[i]n contrast to what is said by the Examiner, Roper et al. does not disclose an electrical transducer, wherein, during normal operation, the processor circuit is shifted temporarily into a low-power sleep mode. What is disclosed by Roper et al. is a transducer, wherein the analog and digital elements of the transducer are separated into an analog IC chip 70 and a digital IC chip 72. Additionally, the operating power for the digital system circuit is decreased whereas the operating power for the analog measurement circuit is increased, which results in increased resolution...This principal of increasing the current of the analog measurement circuit, because of the reduced power consumption of the digital circuit, is described in greater detail in column 6, lines 21 to 43."

The Examiner maintains that Roper indicates that during normal operation "since it is not possible to increase power to the transmitter, it is necessary to either re-allocate power or increase power efficiency to increase the resolution such that greater sensor rangeability is achievable." To carry out this aspect, "the analog measurement circuit is operated at a high voltage and the digital circuit is operated at a low voltage, with the high voltage being selected so that the power consumed by the analog measurement circuit is no more than 18 mW minus the power consumed by the digital circuit and the current drawn by the analog measurement circuit is no more than 3 mA minus the current drawn by the digital circuit."

As noted by applicant, the analog IC chip corresponds to chip "70" in Figure 3, while the digital IC chip corresponds to chip "72" in Figure 3. As can be seen, the digital chip "72" includes the processor.

Therefore, the invention of Roper does disclose temporarily shifting the processor into a low-power sleep mode during normal operation.